

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims

1-45 (Canceled)

46. (Currently Amended) A method of marking a particular tissue area within a human body to identify that particular tissue area for a later diagnostic or therapeutic procedure, said method comprising the steps of:

a) inserting a marker element applier into an incision in said body, wherein said step of inserting said marker element applier comprises:

providing an introducer comprising:

a tube having a longitudinal axis, wherein said tube comprises:

a lumen;

an axial opening at a proximal end of said tube;

a side exit port defining a plane, the plane being parallel to the longitudinal axis of the tube, wherein the side exit port is located adjacent a distal end of said tube;

a closed distal end;

at least one discrete marker element positioned in said tube;

a shaft moveably positioned in said lumen, wherein a proximal end of said shaft extends from said axial opening;

b) positioning said side exit port adjacent the particular tissue area to be marked; and

c) ejecting said at least one marker element from said side exit port into said tissue to be marked, wherein said marker element is positioned in said tube distal to said shaft and said at least one marker element is forced out said side exit port by applying compressive force to said proximal end of said shaft.

47. (Previously Presented) A method of depositing a marker element within tissue, said method comprising the steps of:

a) providing a marker instrument including a tube having a lumen, a side exit port adjacent to a distal end of said tube, a distal portion of said lumen connecting said lumen to said side exit port and a plurality of marker elements disposed within said lumen, including a first marker element at a proximal end of said plurality of marker elements and a second marker element at a distal end of said plurality of marker elements;

b) inserting said tube into a body until said side exit port is proximate to the tissue to be marked; and

c) forcing said second marker element against said distal portion of said lumen and out said side exit port by applying a compressive force to a proximal end of said first marker element.

48. (Previously Presented) A method of depositing a marker element in tissue in a body, said method comprising the steps of:

a) positioning a distal end of a marker element applier adjacent a first region of tissue to be marked; and

b) applying a compressive force to a marker element disposed within said marker element applier to force said marker element out a side exit port in said marker element applier, such that no part of the marker element extends outside the body.

49. (Previously Presented) A method according to Claim 48 wherein said method further comprises the step of:

c) positioning said distal end of said marker element applier adjacent a second region of tissue to be marked; and

d) applying a compressive force to a second marker element disposed within said marker element applier to force said marker element out said exit port.

50. (Previously Presented) A method of marking a biopsy site, the method comprising the steps of:

- a) providing a marker element applier having a proximal end, a distal end, and a side exit port;
- b) providing a marker element adapted to be deployed from the marker element applier;
- c) positioning the side exit port of the marker element applier adjacent a site from which a biopsy sample had been taken; and
- d) applying a force to a marker element disposed within the marker element applier to deploy the marker element through the side exit port of the marker element applier, such that no part of the marker element extends outside the body.

51. (Previously Presented) The method of Claim 50 wherein the step of applying a force to the marker element comprises pushing the marker element.

52-53. (Cancelled).

54. (Previously Presented) The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a radiopaque material.

55. (Previously Presented) The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a non-metallic material.

56. (Previously Presented) The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element comprising a material selected from the group comprising polymers, salts, ceramics, calcium carbonate, and combinations thereof.

57. (Previously Presented) The method of Claim 50 wherein the step of providing a biopsy marker element comprises providing a biopsy marker element which is expandable.

58. (Currently Amended) The method of Claim 50 further comprising the step of using an imaging system.

59. (Previously Presented) The methods of Claim 58 wherein the imaging system is selected from the group consisting of x-ray, ultrasound, and magnetic resonance imaging systems.

60. (Previously Presented) A method for use in a breast biopsy procedure, the method comprising the steps of:

- a) positioning a marker element applier having a side exit port within breast tissue in a body with the aid of an imaging system; and
- b) deploying a marker element through the side exit port of the marker element applier, such that no part of the marker element extends outside the body.

61. (Previously Presented) The method of Claim 60 wherein the step of positioning the marker element applier comprises using an imaging system selected from the group consisting of x-ray, ultrasound, and magnetic resonance imaging systems.

62. (Previously Presented) The method of Claim 60 wherein the step of deploying the marker element comprises pushing the marker element.

63-64. (Canceled)

65. (Previously Presented) The method of Claim 60 wherein the step of deploying a marker element comprises deploying a marker element comprising a radiopaque material.

66. (Previously Presented) The method of Claim 60 wherein the step of deploying a marker element comprises deploying a biopsy marker element comprising a non-metallic material.

67. (Previously Presented) The method of Claim 60 wherein the step of deploying a biopsy marker element comprises deploying a marker element comprising a material selected from the group comprising polymers, salts, ceramics, calcium carbonate, and combinations thereof.

68-78 (Canceled)